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| 10/673,020 | 09/25/2003 | Quan Vu | SONY-26000 | 9530 |
| 7590 Jonathan O. Owens HAVERSTOCK & OWENS LLP 162 North Wolfe Road Sunnyvale, CA 94806 | | | EXAMINER SCOTT, RANDY A | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-------------------------------|---------------------------|--|
| Office Action Summary | Application No. 10/673,020 | Applicant(s) VU ET AL. | |
| | Examiner Randy Scott | Art Unit 2109 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/25/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>3/16/07</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

This Office Action is in response to the Application filed September 24, 2003.

Claim Objections

1. Claims 1, 3-4, 6, 8, 10, 12-13, 15, 17, 19, 21-22, 24, 26, 28, 30-31, 33, 35, 37, 39-40, and 42 have been objected to for the following informalities:

On line 9 of claim 1, the term “the data content” should be –data content-.

On line 2 of claim 3, the term “each channel” should be –each channel within the plurality of channels-.

On line 3 of claim 3, the term “each content sub-channel” should be –each content sub-channel of the one or more content sub-channels-.

On line 5 of claim 3, the term “**the** subject matter of the given channel” should be - subject matter of the given channel-.

On line 2 of claim 4, the term “each channel” should be –said each channel within the plurality of channels-.

On line 2 of claim 4, the term “content sub-channel” should be – said content sub-channel of the one or more content sub-channels-.

On line 3 of claim 6, the term “**the** specific subject matter of the first channel” should be –specific subject matter of the first channel-.

On line 3 of claim 6, the term “**the more** specific subject matter of the first channel” should be –more specific subject matter of the first channel-.

On line 2 of claim 8, the term “the document type definition extensions” should be – extensions of said document type definitions-.

On line 9 of claim 10, the term “transmitting data content” should be – transmitting said data content -.

On line 9 of claim 10, the term “an the one or more” should be – and the one or more-.

On line 10 of claim 10, the term “other network device” should be - other network devices-.

On line 2 of claim 12, the term “each channel” should be –each channel within the plurality of channels-.

On line 3 of claim 12, the term “each content sub-channel” should be –each content sub-channel of the one or more content sub-channels-.

On line 5 of claim 12, the term “**the** subject matter of the given channel” should be - subject matter of the given channel-.

On line 1 of claim 13, the term “each channel” should be –each said channel-.

On line 2 of claim 13, the term “content sub-channel” should be – said content sub-channel of the one or more content sub-channels -.

On line 2 of claim 13, the term “each channel” should be –each channel within the plurality of channels-.

On line 3 of claim 15, the term “**the** specific subject matter of the first channel” should be –specific subject matter of the first channel-.

On line 3 of claim 15, the term “**the more** specific subject matter of the first channel” should be –more specific subject matter of the first channel-.

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On line 2 of claim 17, the term “the document type definition extensions” should be – extensions of said document type definitions-.

On line 9 of claim 19, the term “data content” should be –said data content-.

On line 10 of claim 19, the term “other network device” should be – other network devices-.

On line 3 of claim 21, the term “each channel” should be –each channel within the plurality of channels-.

On line 3 of claim 21, the term “each content sub-channel” should be –each content sub-channel of the one or more content sub-channels-.

On line 5 of claim 21, the term “**the** subject matter of the given channel” should be - subject matter of the given channel-.

On line 2 of claim 22, the term “each channel” should be –said each channel within the plurality of channels-.

On line 2 of claim 22, the term “content sub-channel” should be – said content sub-channel of the one or more content sub-channels -.

On line 3 of claim 24, the term “**the** specific subject matter of the first channel” should be –specific subject matter of the first channel-.

On line 3 of claim 24, the term “**the more** specific subject matter of the first channel” should be –more specific subject matter of the first channel-.

On line 2 of claim 26, the term “the document type definition extensions” should be – extensions of said document type definitions-.

On line 3 of claim 28, the term “other network device” should be – other network devices-.

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On line 2 of claim 30, the term “each channel” should be –said each channel within the plurality of channels-.

On line 3 of claim 30, the term “each content sub-channel” should be –each content sub-channel of the one or more content sub-channels-.

On line 5 of claim 30, the term “**the** subject matter of the given channel” should be - subject matter of the given channel-.

On line 2 of claim 31, the term “each channel” should be –said each channel within the plurality of channels-.

On line 2 of claim 31, the term “content sub-channel” should be – said content sub-channel of the one or more content sub-channels -.

On line 3 of claim 33, the term “**the** specific subject matter of the first channel” should be –specific subject matter of the first channel-.

On line 3 of claim 33, the term “**the more** specific subject matter of the first channel” should be –more specific subject matter of the first channel-.

On line 2 of claim 35, the term “the document type definition extensions” should be – extensions of said document type definitions-.

On line 7 of claim 37, the term “the document type definitions extensions” should be – extensions of said document type definitions-.

On line 8 of claim 37, the term “the document type definitions extensions” should be – said extensions of said document type definitions-.

On line 2 of claim 39, the term “each channel” should be –said each channel within the plurality of channels-.

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On line 3 of claim 39, the term “each content sub-channel” should be –each content sub-channel of the one or more content sub-channels-.

On line 5 of claim 39, the term “**the** subject matter of the given channel” should be - subject matter of the given channel-.

On line 2 of claim 40, the term “each channel” should be –said each channel within the plurality of channels-.

On line 2 of claim 40, the term “content sub-channel” should be – said content sub-channel of the one or more content sub-channels -.

On line 3 of claim 42, the term “**the** specific subject matter of the first channel” should be –specific subject matter of the first channel-.

On line 3 of claim 42, the term “**the more** specific subject matter of the first channel” should be –more specific subject matter of the first channel-.

Appropriate correction is required.

Specification

2. The disclosure is objected to because of the following informalities:

On line 3 of pg. 4, the term “other network device” should be - other network devices-.

On line 20 of pg. 9, the term “two network device” should be - two network devices-.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless - -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-2, 7-11, 16-20, 25-29, 34-38, and 43 are rejected under 35 U.S.C. 102

(e) as being anticipated by Han et al (Pub # US 2002/0143819).

With respect to claims 1 and 37, Han et al teach a network device coupled to a network of devices (see e.g. [0149], lines 6-10, which teaches this limitation because wireless devices, such as cell phones and PDA's are connected to the subscription network), one or more applications (see e.g. [0002], lines 1-4, which teach this limitation because applications are provided through web services and applications server to process requests from subscriber to the syndicator), a network layer coupled to interface with one or more other network devices (see e.g. [0003], lines 8-12, which teaches this limitation because network services are provided for transmitted document information between a subscriber and a syndicator), a communications layer to provide a communications protocol to manage data content exchange between the network device and the one or more other network devices (see e.g. [0009], lines 3-6, which teaches this limitation because protocol standards for communication between the service providers (or syndicator) and the subscribers is utilized within the inventions, also note sec. [0012], lines 1-4, which shows that an information and content exchange protocol is embedded within the inventions for subscribers using a plurality of devices connected to a network to communicate with a provider or syndicator), and an extension layer to provide

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document type definition extensions to the communications layer, wherein the document type definition extensions define a hierarchical data content structure for the data content and metadata corresponding to the hierarchical data content structure (see e.g. [0081], lines 2-5, which teaches this limitation because service descriptors for each exchanged service are implemented in XML format for the already established content exchange established using the communication protocol shown in sec. [0009]. Also note sec. [0087], lines 2-5, which teach a hierarchical category implementation for the transmitted service data descriptor for the services embedded in the exchanged content).

With respect to claims 2 and 38, Han et al teach a limitation of a hierarchical data content structure comprising a plurality of channels (see e.g. [0013], lines 8-11, which teaches this limitation because channels over which the content is exchanged or displayed are established between the syndicator and the subscriber. Also note that classification guidelines for services and content provided by the syndicator are listed in hierarchical categories).

With respect to claim 7, Han et al teach a limitation of the communication layer comprising an ICE protocol (see e.g. [0012], lines 1-4, which teach this limitation because an ICE protocol is implemented within the prior art to manage the delivery of services, delivered using the communications protocol, as shown in sec. [0009]).

With respect to claim 8, Han et al teach a limitation of the Information and Content Exchange protocol including document type definitions (see e.g. [0007], lines 9-11, which teach this limitation because service descriptions are provided for particular services exchanges between the subscriber and syndicator that are managed by the ICE protocol shown in sec. [0012]) and the document type definition extensions providing

extensions to the document type definitions of the Information and Content Exchange protocol (see e.g. [0007], lines 1-3, which teach this limitation because service description information is provided in extensible markup language that is managed by the ICE protocol shown in sec. [0012]. The prior art reads on the claimed limitation because providing the service descriptors in XML language provides extensions to the exchanged descriptors and content provided).

With respect to claims 9 and 43, Han et al teach a limitation of a document type definition being XML based (see e.g. [0007], lines 1-4, which teaches this limitation because the service description information is provided in XML format).

With respect to claims 10 and 19, Han et al teach a limitation of a method for providing data content between a first network device and one or more other network devices (see e.g. [0149], lines 6-10, which teaches this limitation because the transport manager, which may be implemented as a device, is used to exchange content to other devices within the network), providing a communications protocol to manage data content exchange between the first network device and the one or more other network devices (see e.g. [0009], which teaches this limitation because protocols for the communication providers and subscribers is implemented, note that the subscribers and syndicators may transmit data via devices, as shown in sec. [0149]), providing document type definition extensions to the communications protocol, wherein the document type definition extensions define a hierarchical data content structure for the data content and metadata corresponding to the hierarchical data content structure (see e.g. [0081], lines 2-5, which teaches this limitation because service descriptors for each exchanged service are implemented in XML format for the already established content exchange established

using the communication protocol shown in sec. [0009]. Also note sec. [0087], lines 4-6, which teach a hierarchical category implementation for the transmitted service data descriptor for the services embedded in the exchanged content), and transmitting data content between the first network device and the one or more other network device according to the communication protocol and the document type definition extensions to the communications protocol (see e.g. [0149], lines 1-5, which teaches this limitation because exchanges between the transport manager and the plurality of subscribers are communicated according to embedded standard protocols and the service may be provided in an xml schema, as shown in sec. [0163], line 1).

With respect to claims 11 and 20, Han et al teach a limitation of a hierarchical data content structure comprising a plurality of channels (see e.g. [0013], lines 9-11 which teaches this limitation because channels over which the content is exchanged or displayed are established between the syndicator and the subscriber. Also note that classification guidelines for services and content provided by the syndicator are listed in hierarchical categories).

With respect to claims 16 and 25, Han et al teach a limitation of a communications protocol comprising an ICE protocol (see e.g. [0012], lines 1-2, which teach this limitation because an ICE protocol is implemented within the prior art to manage the delivery of services, delivered using the communications protocol, as shown in sec. [0009]).

With respect to claims 17 and 26, Han et al teach a limitation of the Information and Content Exchange protocol including document type definitions (see e.g. [0007], lines 11-12, which teach this limitation because service descriptions are provided for

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particular services exchanges between the subscriber and syndicator that are managed by the ICE protocol shown in sec. [0012]) and the document type definition extensions providing extensions to the document type definitions of the Information and Content Exchange protocol (see e.g. [0007], lines 1-3 which teach this limitation because service description information is provided in extensible markup language that is managed by the ICE protocol shown in sec. [0012]. The prior art reads on the claimed limitation because providing the service descriptors in XML language provides extensions to the exchanged descriptors and content provided).

With respect to claims 18 and 27, Han et al teach a limitation of a document type definition being XML based (see e.g. [0007], lines 1-4, which teaches this limitation because the service description information is provided in XML format).

With respect to claim 28, Han et al teach a limitation of one or more network devices (see e.g. [0076], lines 15-18, which teaches this limitation because the prior art provides service to any device that is able to connect), a first network device that is couple to one or mote other network device (see e.g. [0149], lines 6-10, which teaches this limitation because the syndicator uses a transport manager, which can be implemented as a transport device, to communicate with the subscriber's wireless devices), a first network device comprising one⁷ore more applications (see e.g. [0016], lines 9-11, which teaches this limitation because the syndicators or syndication servers has a plurality of web services that are integrated into client applications), a network layer coupled to interface with the one or more other network devices (see e.g. [0181], lines 6-8, which teaches this limitation because data transmitted from a syndicator to a client device may be exchanged among different networks), a communications layer to

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provide a communications protocol to manage data content exchange between the network device and the one or more other network devices (see e.g. [0009], lines 3-6, which teaches this limitation because protocol standards for communication between the service providers (or syndicator) and the subscribers is utilized within the inventions, also note sec. [0012], lines 1-4, which shows that an information and content exchange protocol is embedded within the inventions for subscribers using a plurality of devices connected to a network to communicate with a provider or syndicator), and an extension layer to provide document type definition extensions to the communications layer, wherein the document type definition extensions define a hierarchical data content structure for the data content and metadata corresponding to the hierarchical data content structure (see e.g. [0081], lines 1-4, which teaches this limitation because service descriptors for each exchanged service are implemented in XML format for the already established content exchange established using the communication protocol shown in sec. [0009]. Also note sec. [0087], lines 2-5, which teach a hierarchical category implementation for the transmitted service data descriptor for the services embedded in the exchanged content).

With respect to claims 29, Han et al teach a limitation of a hierarchical data content structure comprising a plurality of channels (see e.g. [0013], lines 10-11, which teaches this limitation because channels over which the content is exchanged or displayed are established between the syndicator and the subscriber. Also note that classification guidelines for services and content provided by the syndicator are listed in hierarchical categories, as shown in sec. [0087]).

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With respect to claim 34, Han et al teach a limitation of a communications protocol comprising an ICE protocol (see e.g. [0012], lines 1-4, which teach this limitation because an ICE protocol is implemented within the prior art to manage the delivery of services, delivered using the communications protocol, as shown in sec. [0009]).

With respect to claim 35, Han et al teach a limitation of the Information and Content Exchange protocol including document type definitions (see e.g. [0007], lines 9-11, which teach this limitation because service descriptions are provided for particular services exchanges between the subscriber and syndicator that are managed by the ICE protocol shown in sec. [0012]) and the document type definition extensions providing extensions to the document type definitions of the Information and Content Exchange protocol (see e.g. [0007], lines 1-4, which teach this limitation because service description information is provided in extensible markup language that is managed by the ICE protocol shown in sec. [0012]. The prior art reads on the claimed limitation because providing the service descriptors in XML language provides extensions to the exchanged descriptors and content provided).

With respect to claim 36, Han et al teach a limitation of a document type definition being XML based (see e.g. [0007], lines 1-4, which teaches this limitation because the service description information is provided in XML format).

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

6. Claims 3, 12, 21, 30, and 39 are rejected under 35 USC 103 as being unpatentable over Han et al (Pub # US 2002/0143819) in view of Cliff (Pub # US 2003/0212608).

In reference to claims 3, 12, 21, 30, and 39 Han et al teach a limitation of a hierarchical data content structure comprising a plurality of channels (see e.g. [0013], as stated above).

Han et al teaches all the limitations as disclosed above except for a means for configuring each channel within the plurality of channels into one or more content sub-channels, each channel providing data content of a related subject-matter, and each content sub-channel within a given channel segmenting the data content within the given

channel according to more specific subject-matter than the subject-matter of the given channel.

The general concept of a means for configuring each channel within the plurality of channels into one or more content sub-channels, each channel providing data content of a related subject-matter, and each content sub-channel within a given channel segmenting the data content within the given channel according to more specific subject-matter than the subject-matter of the given channel is well known in the art as illustrated by Cliff, which teach a means for configuring each channel within the plurality of channels into one or more content sub-channels (see e.g. [0060], lines 1-4, which teaches this limitation because each channel within the service providing invention may comprise a sub-channel) each channel providing data content of a related subject-matter (see e.g. [0060], lines 1-4, which teach this limitation because each channel may contain a content sub-channel and an advertisement sub-channel), and each content sub-channel within a given channel segmenting the data content within the given channel according to more specific subject-matter than the subject-matter of the given channel (see e.g. [0062], lines 3-7, which teaches this limitation because sub-channels are used to provide information of the media or advertisement for each selected channel).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Han et al to include the use of a means for configuring each channel within the plurality of channels into one or more content sub-channels, each channel providing data content of a related subject-matter, and each content sub-channel within a given channel segmenting the data content within the given channel according to more specific subject-matter than the subject-matter of the given channel as illustrated by Cliff

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in order to effectively provide content distribution to a subscriber through a plurality of channels, as implied in sec. [0031], lines 1-4 of Cliff.

7. Claims 5, 14, 23, 32, and 41 are rejected under 35 USC 103 as being unpatentable over Han et al (Pub # US 2002/0143819) in view of Cliff (Pub # US 2003/0212608).

In reference to claims 5, 14, 23, 32, and 41 Han et al teach a limitation of a hierarchical data content structure comprising a plurality of channels (see e.g. [0013], as stated above).

Han et al teaches all the limitations as disclosed above except for a means for associating a first data content with a first channel and a first content sub-channel within the first channel.

The general concept of a means for associating a first data content with a first channel and a first content sub-channel within the first channel is well known in the art as illustrated by Cliff, which teach a means for associating a first data content with a first channel and a first content sub-channel within the first channel (see e.g. [0062], lines 3-7, which teaches this limitation because information is provided for advertisements of each channel selection, whether it is the first channel of information or not, and advertisement sub-channels located within each channel to present information of each channel).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Han et al to include the use of a means for associating a first data content with a first channel and a first content sub-channel within the first channel as illustrated by Cliff in order to effectively provide content distribution to a subscriber through a plurality of channels, as implied in sec. [0031], lines 1-4 of Cliff.

8. Claims 6, 15, 24, 33, and 42 are rejected under 35 USC 103 as being unpatentable over Han et al (Pub # US 2002/0143819) in view of Cliff (Pub # US 2003/0212608).

In reference to claims 6, 15, 24, 33, and 42 Han et al teach a limitation of a hierarchical data content structure comprising a plurality of channels (see e.g. [0013], as stated above).

Han et al teaches all the limitations as disclosed above except for the first data content being associated with the first channel and the first content sub-channel according to a subject-matter of the first data content, the specific subject-matter of the first channel and the more specific subject-matter of the first content sub-channel.

The general concept of the first data content being associated with the first channel and the first content sub-channel according to a subject-matter of the first data content, the specific subject-matter of the first channel and the more specific subject-matter of the first content sub-channel (see e.g. [0030], lines 1-6, which implies this limitation because a particular channel selected, whether it be a first channel or not, has associated programs and advertisements associated with the channel and the sub-channel carry the programs and the sub-channels also contains intermediary, which provides a description and price information of each program, as shown in sec. [0123], lines 1-5).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Han et al to include the use the first data content being associated with the first channel and the first content sub-channel according to a subject-matter of the first data content, the specific subject-matter of the first channel and the more specific subject-matter of the first content sub-channel as illustrated by Cliff in order to

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effectively provide content distribution to a subscriber through a plurality of channels, as implied in sec. [0031], lines 1-4 of Cliff.

9. Claims 4, 13, 22, 31, and 40 are rejected under 35 USC 103 as being unpatentable over Han et al (Pub # US 2002/0143819) and Cliff (Pub # US 2003/0212608) and further in view of Kolar et al (Pat # US 7,062,546).

In reference to claims 4, 13, 22, 31, and 40 Han et al teach a limitation of a hierarchical data content structure comprising a plurality of channels (see e.g. [0013], as stated above).

Han et al and Cliff teach all the limitations as disclosed above except for metadata defining attributes associated with each channel and content sub-channel within the hierarchical data content structure.

The general concept of a limitation of metadata defining attributes associated with each channel and content sub-channel within the hierarchical data content structure is well known in the art as illustrated by Kolar et al, which teach a data defining attributes associated with each channel and content sub-channel within the hierarchical data content structure (see spec, sec. 3, lines 48-53, which teaches this limitation because text is provided that defines a data channel and sub-channels within a network. The text is of configuration input for both of the channel and sub-channels and includes references that hierarchically relate each channel and sub-channel).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Han et al and Cliff to include the use of a limitation of metadata defining attributes associated with each channel and content sub-channel within the

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hierarchical data content structure as illustrated by Kolar et al in order to successfully label and identify information within hierarchically related network of channels and sub-channels, as implied in sec. 3, lines 40-43 of Kolar et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Scott whose telephone number is 571-270-1598.

The examiner can normally be reached on Mon - Thurs. 7:30-5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules can be reached on 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R.A.S.

25 April 2007

FRANTZ JULES
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to be 'Frantz Jules', written over a horizontal line.

